

REMARKS

Claims 1-5, 7, 8, 10-19, and 27 are of record in this application. Claims 1, 7, and 27 have been amended, and claims 6, 9, and 20-26 have been cancelled. No new claims have been added.

Support for the amendments is inherent in the original disclosure. Claim 1 has been limited to a method of controlling pests which are ticks by incorporating the limitations of claim 26 therein. The recitation of ticks is supported by original claims 6 and 9 and the specification at paragraph no. 0021.

In view of the limitation of claim 1 to ticks, claim 7 has been amended to remove the recitation of non-tick pests. Claim 9 has been cancelled because the same tick pests are recited in claim 27, and the claim would be duplicative if amended to remove the recitation of non-tick pests. Claim 27 has been amended to correct its dependency.

Allowable Subject Matter

Applicants kindly thank the Examiner for indicating that claims 26 and 27 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any

intervening claims. Accordingly, claim 1 has been amended to incorporate the limitations of claim 26 therein.

Rejection Under 35 U.S.C. 103

Claims 1-25 have been rejected under 35 U.S.C. 103 as being unpatentable over the combination of Lichtenstein and Belden. The Examiner has taken the position that the references disclose that the activity of organophosphate (OP) insecticides against insects is enhanced by the herbicides atrazine, simazine, monuron, and 2,4-D. The Examiner has concluded that it would have been obvious to combine triazine herbicides with OP insecticides to yield synergistically active insecticidal compositions.

Lichtenstein studied the effects of several herbicides, including atrazine and simazine, on a variety of insecticides (including the organophosphate insecticides parathion and diazinon) which were commonly available at that time. The authors disclosed that atrazine significantly increased the toxicity of parathion against fruit flies (*Drosophila melanogaster*), houseflies (*Musca domestica* L.), and mosquito larvae (*Aedes aegypti* L.). Similar results were seen with

atrazine and other organophosphate insecticides against the fruit fly. See Tables 1 and 2, and page 849, therein.

Belden disclosed that atrazine significantly increased the toxicity of organophosphate (OP) insecticides against larvae of the water midge, *Chironomus tentans*.

The instant invention is drawn to a method and compositions for controlling economically important ticks and blood-feeding flies. Applicants have discovered that combining a cytochrome P450 monooxygenase inducer with an organophosphate (OP) pesticide (insecticide or acaracide) provides effective control of these ticks and flies, and particularly against OP-resistant strains of the ticks and flies. In use, a pesticidally effective amount of a composition of the cytochrome P450 monooxygenase inducer and OP pesticide is applied to the locus of the targeted tick or fly.

In response, Applicants kindly thank the Examiner for indicating that claims 26 and 27, limited to ticks, would be allowable. Applicants have amended the claims accordingly. In the amendment submitted August 29, 2005, Applicants presented their belief that a practitioner of ordinary skill in the art would have no reason to expect that atrazine or other herbicides would increase the toxicity of OP insecticides to ticks. As disclosed by Metcalf at pages 180 and 181 (previously presented),

ticks are not even insects but belong to the taxonomic class *Arachnida* (insects belong to the class *Hexapoda*). Thus, the skilled practitioner, having the prior art of record before them, would have no reason to expect that the findings of Lichtenstein and Belden with respect to four species of insects (i.e., mosquitos, two flies, and the water midge) would be applicable to ticks.

Applicants also believe that the process of the invention for the treatment of flies, and particularly blood-feeding flies, is non-obvious. In view of the great number of fly species and their diversity in habits and characteristics, Applicants believe that the skilled practitioner could not reasonably predict that all flies would exhibit the same increased sensitivity to OP insecticides when combined with triazine herbicides as the two fly species, mosquitos, and water midges of the prior art. Nonetheless, the claims of record have been limited to ticks, in an effort to expedite prosecution.

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For the reasons stated above, claims 1-5, 7, 8, 10-19, and 27, are believed to distinguish over the prior art of record. Allowance thereof is respectfully requested.

Respectfully submitted,



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